

AMENDMENT TO THE CLAIMS

Please amend the claims as follows, without prejudice or disclaimer. This listing of the claims replaces any prior listings of the claims.

1. (Currently amended) A method for treating melanoma comprising:
 - a) administering to a host a composition containing a nucleic acid encoding a melanoma-associated tumor antigen such that the host develops an immune response against the tumor antigen; and,
 - b) subsequently administering ~~a therapeutically effective amount of interferon~~ 10 MU/m²/day interferon alpha to the host;whereby the combination of steps a) and b) provides an enhanced T cell response in the host relative to that which occurs following step a) alone.
- 2-3. Cancelled.
4. (Previously Amended) The method of claim 1 wherein the nucleic acid is contained within a plasmid or a viral vector.
5. (Original) The method of claim 4 wherein the viral vector is selected from the group consisting of poxvirus, adenovirus, retrovirus, herpesvirus, and adeno-associated virus.
6. (Original) The method of claim 5 wherein the viral vector is a poxvirus selected from the group consisting of vaccinia, NYVAC, MVA, avipox, canarypox, ALVAC, ALVAC(2), fowlpox, and TROVAC.
7. (Original) The method of claim 6 wherein the viral vector is a poxvirus selected from the group consisting of NYVAC, ALVAC, and ALVAC(2).
- 8-10. Cancelled.
11. (Currently amended) The method of claim 1 wherein the tumor antigen is selected from the group consisting of gp100, MART-1/Melan A, gp75/TRP-1, tyrosinase, NY-ESO-1, melanoma proteoglycan, a MAGE antigen, a BAGE antigen, a GAGE antigen, a RAGE antigen, N-acetylglucosaminyltransferase V, p15, ~~β -catenin~~, MUM-1, cyclin dependent kinase 4, p21-ras, BCR-abl, p53, p185 HER2/neu, epidermal growth factor receptor, ~~carcinoembryonic antigen~~, ~~modified carcinoembryonic antigen~~, ~~carcinoma-associated mutated mucins~~, ~~an Epstein Barr Virus EBNA gene product~~, ~~papilloma virus E7~~, ~~papilloma virus E6~~, prostate specific antigen, prostate

~~specific membrane antigen, KSA, kinesin 2, HIP 55, TGF β 1 anti apoptotic factor, tumor protein D52, H1FT, an NY BR antigen, a fragments thereof, and a derivatives thereof.~~

12. (Currently amended) The method of claim 11 wherein the tumor antigen is selected from the group consisting of gp100, MAGE-1, MAGE-2, MAGE-3, MAGE-4, MAGE-6, MAGE-12, MAGE-51, GAGE-1, GAGE-2, and RAGE-1, ~~NY BR 1, NY BR 62, NY BR 75, NY BR 85, NY BRP 87, and NY BR 96.~~
13. (Original) The method of claim 12 wherein the tumor antigen is gp100.
14. (Currently amended) The method of claim 1 wherein the composition comprises an poxviral vector encoding a the tumor antigen ~~or a fragment thereof and the cytokine is a T-cell activating cytokine.~~
15. (Currently amended) The method of claim 14 wherein poxviral vector is an ALVAC vector ~~and the T-cell activating cytokine is IFN.~~
16. Cancelled
17. (Currently amended) The method of claim 16 wherein the ~~T-cell activating cytokine~~ interferon alpha is IFN α 2b.
18. (Currently amended) The method of claim 18 wherein IFN α 2b is administered at at least 10 MU/m²/day ~~IV~~ at least two times per week for at least two weeks.
19. (Currently amended) The method of claim 18 wherein IFN α 2b is administered at at least 10 MU/m²/day ~~IV~~ at least three times per week for at least two weeks.
20. (Currently amended) The method of claim 19 wherein IFN α 2b is administered at at least 10 MU/m²/day ~~IV~~ at least four times per week for at least two weeks.
21. (Currently amended) The method of claim 20 1 wherein IFN α 2b is administered at at least 10 MU/m²/day ~~IV~~ at least five times per week for at least two weeks.
22. (Currently amended) The method of claim 21 wherein IFN α 2b is administered at at least 20 MU/m²/day ~~IV~~ at least five times per week for at least four weeks.
23. (New) The method of claim 11 wherein the tumor antigen is a modified gp100.
24. (New) The method of claim 23 wherein the nucleic acid encodes a modified gp100 tumor antigen comprising the amino acid sequence IMDQVPFSV (SEQ ID NO.: 2).
25. (New) The method of claim 23 wherein the nucleic acid encodes a modified gp100 tumor antigen comprising the amino acid sequence YLEPGPVTV (SEQ ID NO.: 3).

26. (New) The method of claim 23 wherein the nucleic acid encodes a modified gp100 tumor antigen comprising the amino acid sequence IMDQVPFSV (SEQ ID NO.: 2) and the amino acid sequence YLEPGPVTV (SEQ ID NO.: 3).
27. (New) The method of claim 1 wherein the administration in step b) is followed by one or more administrations of interferon alpha at a reduced dosage.
28. (New) The method of claim 27 wherein the reduced dosage is reduced by 33% of the original dosage.